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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/636,814	08/10/2000	David J. Edlund	NPW 307	7039

7590 10/05/2004

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EXAMINER

RIDLEY, BASIA ANNA

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/636,814

Applicant(s)

EDLUND ET AL.

Examiner

Basia Ridley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 5, 7 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 9-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 081000, 013101, 021201, 050101, 072301, 040802
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of Species A and Species ii in the reply filed on 12 July 2004 is acknowledged.
2. Claims 5 and 7-8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6, 10, 13-19, 21-22 and 24-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinto (USP 4,238,403).

Regarding claims 1, 10, 13 and 21-22, Pinto discloses fuel processing system comprising a volatile feedstock delivery system comprising a heated reservoir (34), a delivery system (Figure), a heating assembly (30), a fuel processor (40), and a supply system (35). With regard to claim 1 and 21, addition of a backup system for use during emergency shutdown or repair of the system, the backup system including a backup reservoirs, would have been obvious. Mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 124 USPQ 378, 380 (CCPA 1960). Further, it has been held that mere duplication of the essential

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working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claims 2-4 and 6 Pinto discloses the system wherein the heating assembly (30) is adapted to heat the reservoirs by heat exchange with a heated fluid stream (10), including the heated exhaust stream from a combustion chamber (Figure, C1/L54).

Regarding claim 14 Pinto discloses the system wherein the supply reservoir is inherent (Figure).

Regarding claims 15-17 and 24-31 Pinto discloses the system wherein the control system is adapted to control the operation of heating assembly and, inherently the pressure of volatile carbon containing feedstock in the reservoir (Figure).

Regarding claims 18-19 Pinto discloses the system wherein the fuel processor includes steam reformer and hydrogen purification reactor (C4/L62-C7/L9), while the reference does not explicitly disclose said purification reactor using a pressure driven separation process, such processes are well known in the art and it would have been obvious to one having ordinary skill in the art at the time of the invention to use a known hydrogen purification process in the system of Pinto based on desired purity of product gas and its final use.

5. Claims 9, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinto (USP 4,238,403) in view of Palmer (USP 5,401,589).

Regarding claim 9, Pinto discloses all the claim limitations as set forth above. Additionally while the reference discloses the need to heat the reservoir by heat exchanger (30), but fails to disclose a shell surrounding the reservoir.

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Palmer discloses a shell surrounding at least a portion of the reforming chamber, wherein the shell is spaced away from the reforming chamber to define a cavity for heated fluid stream (C3/L3-8).

It would have been obvious to one having ordinary skill in the art at the time of the invention to use shell of Palmer as heat exchange means in the system of Pinto for the purpose to take advantage of available heat where needed in the apparatus.

Regarding claims 20 and 23, Pinto discloses all the claim limitations as set forth above, but fails to expressly disclose a fuel cell stack.

Palmer discloses a fuel cell stack (Fig. 1) including at least one fuel cell adapted to produce electric power from the product stream.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use product gas of Pinto in the fuel cell of Palmer as doing so would amount to nothing more than a use of a known compound for its intended use in a known environment to accomplish entirely expected result.

6. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinto (USP 4,238,403) in view of Edwards (USP 4,027,495).

Regarding claims 11-12, Pinto discloses all the claim limitations as set forth above but the reference does not explicitly disclose the vent assembly.

Edwards discloses hydrocarbon tank having a vent assembly for use during filling (C2/L21-30).

It would have been obvious to one having ordinary skill in the art at the time of the invention to use vent assembly of Edwards to allow for inherent venting of hydrocarbons during filling the reservoir of Pinto.

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7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

### ***Double Patenting***

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-4, 6 and 9-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-66 of U.S. Patent No. 6,375,906.

Claims 1-66 of U.S. Patent No. 6,375,906 discloses all of the limitations as recited in claims 1-4, 6 and 9-31 of the instant application. With regard to claim 1 and 21, addition of a backup system for use during emergency shutdown or repair of the system,

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the backup system including a backup reservoirs, would have been obvious. Mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 124 USPQ 378, 380 (CCPA 1960). Further, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

**Conclusion**

10. In view of the foregoing, none of the claims are allowed.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Basia Ridley, whose telephone number is (571) 272-1453.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola, can be reached on (571) 272-1444.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Technical Center 1700 General Information Telephone No. is (571) 272-1700. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions on access to the Private PAIR system should be directed to the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



Basia Ridley  
Examiner  
Art Unit 1764

BR  
October 1, 2004